Economic Development Activities

Overview

Utah's economic development efforts have been restructured to focus on what Utah does best. The result is the Governor's Office of Economic Development (GOED), Utah's Economic Cluster Initiative, a revamped Centers of Excellence, and the Utah Science, Technology and Research (USTAR) initiative.

Economic Clusters

Economic clusters are groups of related businesses and organizations within industry sectors whose collective excellence, collaboration and knowledge provide a sustainable competitive advantage. Using best practices, Utah is capitalizing on its core strengths and facilitating the development of clustered business environments to accelerate growth.

The Governor's Office of Economic Development (GOED) seeks to align resources, infrastructure and policies that contribute to successful economic clusters. The key is to align industry, research universities, capital, talent, technology and government around industry sectors that possess the greatest opportunity.

In 2005, GOED reported the top features shared by most successful clusters are:

1. Networking partnerships between regional businesses (over 75%)
2. Access to innovative technology (over 70%)
3. Access to human capital (over 70%)
4. Physical infrastructure (over 40%)
5. Presence of large firms (40%)
6. Access to finance (35%).

Interestingly, the features of successful clusters parallel what CEOs report Utah lacks. At their summit with Governor Huntsman in 2005, CEOs reported the challenges to business in Utah include:

1. Difficulty accessing early stage capital
2. Rising health care costs
3. Difficulty recruiting experienced talent
4. Need for networking and partnering opportunities
5. Improve alignment of education with industry
6. Utah's image

Evidence of the importance of Utah's clusters includes the expansion of Cyberkinetics, MPRI's driver training contract, and the creation of Rocky Mountain Testing Solutions (RMTS). All these firms exist in Utah because their respective clusters nurtured their growth with talent and access to capital and markets.

Cyberkinetics, in the life sciences cluster, is expanding its research and manufacturing facility in the University of Utah's Research Park. The firm's proprietary NeuroPort and BrainGate systems are manufactured for human use in its Class 10,000 cleanroom. The ultimate goal of BrainGate is to create a safe, effective and unobtrusive operating system enabling those with motor impairments to quickly and reliably control a wide range of devices, including computers, by simply thinking. The success of BrainGate will be a powerful driver in attracting talent and capital to Utah.

MPRI, in the information technology cluster, has been awarded one of the largest simulation training contracts in trucking history. From its Salt Lake City operation, MPRI will manufacture, ship, and maintain driving simulators for Schneider National, a leading supplier of transportation and logistics to most Fortune 500 companies. Under the contract, Schneider will purchase simulators for its North American driver training centers. The firm is incorporating simulation in its training program in order to expose its drivers to a broader range of situations, including driving in inclement weather, handling equipment failures or navigating heavy traffic. MPRI's success with Schneider will increase national and international opportunities for Utah's IT cluster.

RMTS is a joint venture between Setpoint, which has manufactured award-winning automated equipment solutions for the last 13 years, and the Manufacturing Extension Partnership (MEP) Utah which has served Utah manufacturers for the past decade. Setpoint in concert with GOED conducted a gap analysis in the Utah manufacturing sector and found that major manufacturers were required to send their products out of state for "Military Special Testing." This level of testing is a widely accepted method for independent product and packaging certification for high technology products. As a result of this GOED research, Setpoint formed Rocky Mountain Testing Solutions a critical local service for Utah manufacturers.

Setpoint has seen significant growth since it was founded in 1992, and has been included in Inc Magazine's 500 fastest growing companies. Additionally, it has been included in Utah's top 100 fastest growing privately held companies. This expansion by RMTS will help satisfy the large demand for environmental testing created by Utah's emphasis on business growth in the high-technology, aerospace, and defense markets.

Centers of Excellence

Almost two decades ago, the State of Utah anticipated the importance of clusters by creating the Centers of Excellence. The program funds university research in Utah with promising commercial application. To date, over 100 centers have received almost $50 million in state general funds. The centers have both assisted existing companies to collaborate with university researchers and transferred academic research into company operations. Almost 200 companies have been affiliated with the centers, and 61 are still doing business in Utah, employing 2,000 people at an average wage of $60,000.

Using the Centers as a model, the Utah business community is championing the Utah Science, Technology and Research (USTAR). Senate Bill 192 from the Legislature's 2005 General Session allocated funding to Utah State University and the University of Utah to hire research teams, acquire critical research equipment at the University of Utah, and develop an investment prospectus.

USTAR's possibility is exemplified by the mapping of the human genome. Utah's research universities were involved in this project from its inception and Utah scientists developed key technologies critical to the project's success. As a result, Utah can claim scientific leadership in areas like gene manipulation, cellular processes, scientific instrumentation, information technologies, and bioengineering that will be the basis for billion dollar companies in areas like regenerative medicine, infectious disease treatments, bio-defense, and agriculture.

In addition, the involvement of the State's research universities in the human genome project was the genesis of the Utah Population Database, which is built on merged medical records and The Church of Jesus Christ of Latter-Day Saints' genealogical records. This database is a tool for

medical discovery that is unique in the world. It is the critical resource in the development of personalized medicine, which is already starting to revolutionize healthcare, medical diagnostics, and drug discovery. It is a resource that has the potential to foster companies in billion-dollar emerging industries and secure Utah's economic future.

More than 180 Utah companies were founded on university technologies over the past twenty years, and over 120 are prospering in Utah. These include major employers like Myriad Genetics, HyClone Laboratories, Sorenson Communications, NPS Pharmaceuticals, Watson Laboratories, and Evans and Sutherland. This history of success is evidence Utah State University and the University of Utah can successfully commercialize technologies that create new businesses and jobs that strengthen Utah's economy. The objective of USTAR is to bolster Utah's research strengths and significantly increase technology commercialization to create many more high caliber jobs throughout the state.

Conclusion

GOED, the Clusters Initiative, revamping Centers of Excellence, and USTAR are the tools the State of Utah is using to accelerate economic development. Building on our existing competitive advantage in certain core competencies, such as life science and information, Utah hopes to create more high paying jobs and sustain our high quality of life.

Table 94
Utah's Economic Clusters

Life Sciences	Software Development & Information Technology	Aerospace	Defense and Homeland Security	Financial Services	Energy and Natural Resources	Competitive Accelerators
Genetics & biomarker development	Systems management & security	Composites & advanced materials	Smart sensors & chemical/biological detection	Industrial banks	Energy independence	Nanotechnology
Pharma research & clinical services	Web services & software applications	Propulsion systems	Autonomous systems		Mining & mineral technology	Advanced manufacturing
Neuroscience	Wireless technologies	Communications & avionics			Water management	Logistics & distribution centers
Medical devices & products	Digital media & entertainment technology					Networking infrastructure
Microbe biotechnology	High-performance computing applications					Quality of life
Environmental & agricultural technology & remediation	Simulations, images, modeling & algorithms					Personal wellness & nutraceuticals
Cellular systems (nutrition research & infectious diseases)	GIS mapping & imaging					Family related products
						Outdoor recreation

Table 95
Employment and Wages Connected with the Centers of Excellence during 2003

Cluster	Center	Employment	Payroll	Average Wage
Information Technology	3D Computer Graphics	24	$645,600	$26,900
Natural Resources	Advanced Combustion Engineering Research	33	$2,494,200	$75,582
Competetive Accelerators	Advanced Composites Manufacturing & Engineering	41	$1,466,800	$35,776
Competetive Accelerators	Advanced Structural Composites	19	$803,000	$42,263
Competetive Accelerators	Advanced Supercritical Fluid Separation Technologies	61	$3,492,000	$57,246
Aerospace	Aerospace Technology	1	$12,500	$12,500
Information Technology	Biocatalysis	10	$127,000	$12,700
Life Sciences	Bioremediation	9	$270,000	$30,000
Life Sciences	Biotechnology	2	$93,800	$46,900
Life Sciences	Cancer Genetic Epidemiology	500	$31,340,000	$62,680
Life Sciences	Cell Signaling	40	$2,306,800	$57,670
Competetive Accelerators	Chemical Separations	18	$831,600	$46,200
Information Technology	Communications Research (Tomography)	15	$1,060,500	$70,700
Information Technology	Computer Graphics & Scientific Visualization	85	$4,671,400	$54,958
Information Technology	Controlled Chemical Delivery	324	$19,764,000	$61,000
Life Sciences	CROMDI Multi-Dimensional Information	1	$29,800	$29,800
Life Sciences	Dairy Technology Commercialization	17	$768,400	$45,200
Life Sciences	Design Systems	23	$1,609,000	$69,957
Competetive Accelerators	Direct Machining & Control	3	$300,000	$100,000
Information Technology	Electronic Medical Education	14	$959,000	$68,500
Competetive Accelerators	Engineering Design	32	$2,486,400	$77,700
Information Technology	High Speed Information Processing Chip	8	$425,000	$53,125
Information Technology	Industrial Imaging	2	$23,800	$11,900
Information Technology	Information Technology	2	$29,800	$14,900
Natural Resources	Minerals Technology	2	$29,500	$14,750
Life Sciences	Neural Interfaces	41	$2,374,500	$57,915
Natural Resources	Profitable Use of Agricultural Byproducts	14	$441,094	$31,507
Competetive Accelerators	Quality and Integrity Design	1	$120,000	$120,000
Competetive Accelerators	Rapid Product Realization	12	$267,600	$22,300
Competetive Accelerators	Scientific Computing & Imaging	90	$4,050,000	$45,000
Defense	Self Organizing Intelligent Systems	27	$1,630,800	$60,400
Life Sciences	Signal Processing	101	$7,989,100	$79,100
Information Technology	Solid Oxide Fuel Cell	15	$667,500	$44,500
Aerospace	Space Engineering	281	$16,888,100	$60,100
Natural Resources	The Center for Advanced Joining of Materials	17	$510,000	$30,000
Life Sciences	Ventricular Assist Device	16	$1,129,600	$70,600
	Other	107	$6,426,500	$60,061
	Total	2,008	$118,534,694	$59,031